

## CLAIMS

What is claimed is:

- 1           1.     A method of managing an Emergency Services Call (ESC) within  
2     a network while a party is engaged in an on-going call, wherein the network includes a  
3     serving entity, an anchor entity, a Position Determination Entity (PDE), and an  
4     Emergency Services Entity (ESE), and wherein the on-going call has been handed off  
5     from the anchor entity to the serving entity, comprising the steps of:  
6                 receiving a request for the ESC at the serving entity;  
7                 receiving a request for a current location of the party at the PDE;  
8                 determining the current location of the party by the PDE;  
9                 receiving the current location of the party at the serving entity;  
10                sending the current location to the anchor entity;  
11                setting up the ESC between the anchor entity and the ESE; and  
12                subsequently updating the anchor entity with the current location.
- 1           2.     The method of Claim 1, wherein the step of receiving a request for  
2     the ESC at the serving entity further includes the step of:  
3                 receiving a request for the ESC after the on-going call is placed on hold.

1           3.     The method of Claim 1, wherein the serving entity includes a  
2     Serving Mobile Switching Center (SMSC) and an associated Mobile Position Center  
3     (SMPC), and wherein the step of receiving a request for a current location of the party at  
4     the PDE further includes the steps of:

5                 sending an ISPOSREQ message from the SMSC to the SMPC; and

6                 sending a GPOSREQ from the SMPC to the PDE.

1           4.     The method of Claim 1, wherein the serving entity includes a  
2     Serving Mobile Switching Center (SMSC) and an associated Mobile Position Center  
3     (SMPC), and wherein the step of receiving the current location of the party at the serving  
4     entity further includes the steps of:

5                 sending a gposreq response including the current location of the party  
6     from the PDE to the SMPC; and

7                 sending an isposreq response including the current location of the party  
8     from the SMPC to the SMSC.

1           5.     The method of Claim 1, wherein the serving entity includes a  
2     Serving Mobile Switching Center (SMSC) and an associated Mobile Position Center  
3     (SMPC), and wherein the step of sending the current location to the anchor entity further  
4     includes the step of:

5                 sending a FLASHREQ message including the current location from the  
6     serving entity to the anchor entity.

1           6.     The method of Claim 1, wherein the anchor entity includes an  
2     Anchor Mobile Switching Center (AMSC) and an associated Mobile Position Center  
3     (AMPC), and wherein the step of subsequently updating the anchor entity with the  
4     current location further includes the step of:

5                 sending a GPOSDIR message including the current location of the party  
6     from the AMSC to the AMPC.

1           7.     The method of Claim 1, wherein the ESE is an Emergency  
2     Services Network Entity.

1           8.     The method of Claim 1, wherein the party is a non-troubled party  
2                 engaged in the on-going call with a troubled party at a troubled  
3                 location, further including the steps of:

4                 receiving a request for the troubled location at the PDE;

5                 determining the troubled location of the troubled party by the PDE;

6                 receiving the troubled location of the troubled party at the serving entity;

7     and

8                 sending the troubled location to the anchor entity.

1           9.     A network for managing an Emergency Services Call (ESC)  
2 invoked by a party while the party is engaged in an on-going call that has been handed  
3 off to serve the party at a current location, comprising:  
4           an Anchor Entity for updating the current location subsequent to setting up  
5 the ESC;  
6           a Serving Entity in electronic communication with the Anchor Entity;  
7           a Position Determining Entity (PDE) in electronic communication with the  
8 Serving Entity; and  
9           an Emergency Services Entity (ESE) in electronic communication with the  
10 Anchor Entity.

1           10.    The network of Claim 9, wherein the Serving Entity includes:  
2           a Serving Mobile Switching Center (SMSC) in electronic communication  
3 with the PDE; and  
4           an associated Mobile Position Center (SMPC) in electronic  
5 communication with the SMSC.

1           11.    The network of Claim 9, wherein the Anchor Entity includes:  
2           an Anchor Mobile Switching Center (AMSC) in electronic communication  
3 with the Serving Entity; and  
4           an associated Mobile Position Center (AMPC) in electronic  
5 communication with the AMSC.

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12. The network of Claim 9, wherein the ESE is an Emergency  
Services Network Entity.

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1           13.     A method of managing an Emergency Services Call (ESC) within  
2     a network while a non-troubled party is engaged in an on-going call with a troubled party  
3     at a troubled location, wherein the network includes a serving entity, an anchor entity, a  
4     Position Determination Entity (PDE), and an Emergency Services Entity (ESE), and  
5     wherein the on-going call has been handed off from the anchor entity to the serving  
6     entity, comprising the steps of:

7                     receiving a request for the ESC at the serving entity;  
8                     receiving a request for the troubled location of the troubled party at the  
9     PDE;  
10                    determining the troubled location of the troubled party by the PDE;  
11                    receiving the troubled location of the troubled party at the serving entity;  
12                    sending the troubled location to the anchor entity; and  
13                    setting up the ESC between the anchor entity and the ESE.

1           14.     The method of Claim 13, wherein the request for the ESC includes  
2     a special key code indicating that the troubled location will be determined by the PDE.